TABLE OF CONTENTS

Chapter 1 1
INTRODUCTION 1

Chapter 2 2
SYSTEM REQUIREMENTS 2

Chapter 3 3
LIMITATIONS 3
i-mode....3
d-mode....3

Chapter 4 4
HARDWARE INSTALLATION 4
i-Mode....4
d-Mode....4

Chapter 5 5
SOFTWARE INSTALLATION 5
Older version installed....9

Chapter 6 11
VIRTU UNIVERSAL MVP OPERATION 11
VIRTU Universal MVP Control Panel....12
Main Tab....12
Performance Tab....13
Games Tab....14
About Tab....16

Memo

Chapter 1
Introduction

Lucid VIRTU Universal MVP solution is designed for the platforms with one integrated and one discrete GPU. VIRTU Universal MVP dynamically assigns tasks to best available graphics resource based on power, performance and features. There is no need for HW or HW changes. VIRTU Universal MVP allows user to fully utilize the capabilities of both integrated and discrete GPUs.

When no high end graphics is used and display is connected to integrated GPU, the discrete GPU is put in idle mode thus GPU utilization, heat, fan speed and power are down to near zero, turning the system to an environment friendly platform.

Advanced performance improvement features of VIRTU Universal MVP, Virtual Vsync and HyperFormance provide the uncompromised image quality and game responsiveness performance gain.

Chapter 2
System Requirements

CPU:	Any Intel/AMD CPU with integrated graphics support
Chipset:	Any chipset with integrated graphics output
Discrete GPU:	Any Nvidia/AMD GPU with DX9/DX10/DX11 support
Memory size:	2GB
Operating system:	Windows 7 32/64 bit
Hard Disk Space:	20Mb

Chapter 3
Limitations

3.1 i-mode

GPU vendor specific multi GPU acceleration features such as SLI and CrossFire are not available in i-mode due to GPU vendor limitations.

3.2 d-mode

In d-mode SLI and CrossFire are available. Media features can be virtualized by Virtu Universal MVP to integrated GPU.

Virtual Vsync and HyperFormance features are not available when SLI or CrossFire is enabled

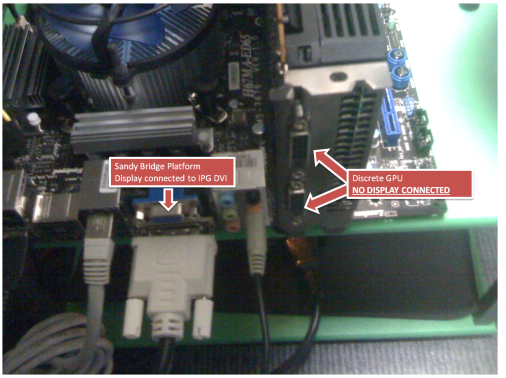
Chapter 4

Hardware installation

4-1. i-Mode

i-Mode provides user with near zero performance overhead on 3D graphics games, Virtual VSync and Hyperformance features, integrated GPU special features and power saving options when no 3D gaming is used.

To use Lucid VIRTU Universal MVP solution in **i-Mode**, display must be always connected to motherboard video output.



Display can be also connected to VGA or HDMI output instead of DVI output.

4-2. d-Mode

d-Mode is provided for demanding 3D gamers to achieve uncompromised 3D performance of discrete GPU installed in the system, along with Virtual VSync and Hyperformance quality/performance improvement features. In this mode, Virtu Universal MVP allows user to utilize integrated GPU special features such as trascoding, while display is connected to discrete GPU.

Note: in most cases the differences of 3D performance between i-Mode and d-Mode are unnoticeable to the user, so it is recommended to use i-Mode to save power.

To use Lucid VIRTU Universal MVP solution in **d-Mode**, display must be connected to discrete GPU installed in the system

Chapter 5

Software installation

Notes

a. GPU drivers and Lucid VIRTU Universal MVP solution should be installed before running any graphic application.

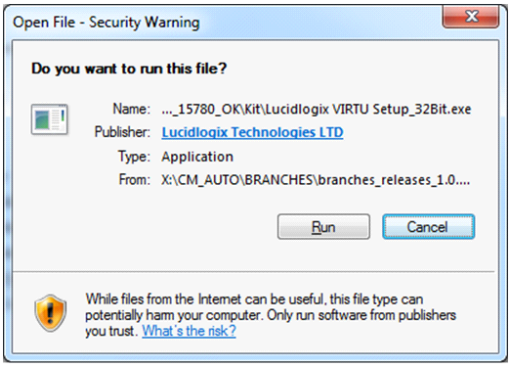
b. GPU drivers must be installed prior to Lucid VIRTU Universal MVP installation.

c. It is recommended to restart the system after every driver installation

d. All examples relate to 32 bit installation.

1. Double-click Lucidlogix **VIRTU MVP Setup_32Bit.exe**

The following security message may appear:

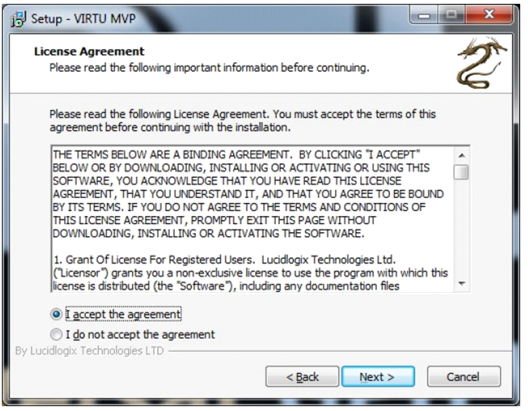

Open File - Security Warning
Do you want to run this file?
Name: ..._15780_OK\Kit\Lucidlogix VIRTU Setup_32Bit.exe
Publisher: Lucidlogix Technologies LTD
Type: Application
From: X:\CM_AUTO\BRANCHES\branches_releases_1.0....
Run
Cancel
While files from the Internet can be useful, this file type can potentially harm your computer. Only run software from publishers you trust. What's the risk?

Press “Run” to proceed.

2. The VIRTU Universal MVP Setup Wizard window is displayed.

Setup - VIRTU MVP
Welcome to the VIRTU MVP Setup Wizard
This will install VIRTU MVP version 2.1.107 on your computer.
It is recommended that you close all other applications before continuing.
Click Next to continue, or Cancel to exit Setup.
Next >
Cancel

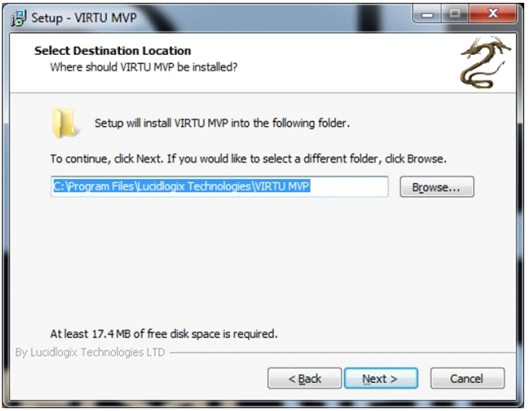
3. Click Next. The End User License Agreement window is displayed.


Setup - VIRTU MVP
License Agreement
Please read the following important information before continuing.
Please read the following License Agreement. You must accept the terms of this agreement before continuing with the installation.
THE TERMS BELOW ARE A BINDING AGREEMENT. BY CLICKING "I ACCEPT" BELOW OR BY DOWNLOADING, INSTALLING OR ACTIVATING OR USING THIS SOFTWARE, YOU ACKNOWLEDGE THAT YOU HAVE READ THIS LICENSE AGREEMENT, THAT YOU UNDERSTAND IT, AND THAT YOU AGREE TO BE BOUND BY ITS TERMS. IF YOU DO NOT AGREE TO THE TERMS AND CONDITIONS OF THIS LICENSE AGREEMENT, PROMPTLY EXIT THIS PAGE WITHOUT DOWNLOADING, INSTALLING OR ACTIVATING THE SOFTWARE.
1. Grant Of License For Registered Users. Lucidlogix Technologies Ltd. ("Licensor") grants you a non-exclusive license to use the program with which this license is distributed (the "Software"), including any documentation files
I accept the agreement
I do not accept the agreement
By Lucidlogix Technologies LTD
< Back
Next >
Cancel

4. Read the license agreement and select I accept the agreement.

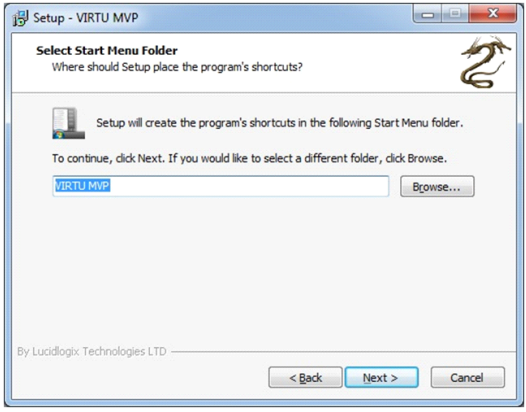
5. Click **Next**.

Then Select Destination Location dialog box is displayed.


Setup - VIRTU MVP
Select Destination Location
Where should VIRTU MVP be installed?
Setup will install VIRTU MVP into the following folder.
To continue, click Next. If you would like to select a different folder, click Browse.
C:\Program Files\Lucidlogix Technologies\VIRTU MVP
Browse...
At least 17.4 MB of free disk space is required.
By Lucidlogix Technologies LTD
< Back
Next >
Cancel

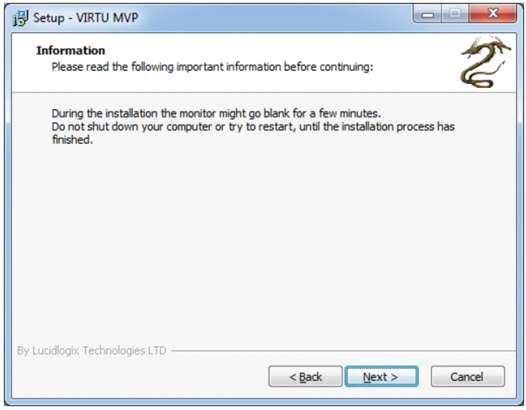
6. Click **Next** to accept the default location.

Select Start Menu Folder window is displayed.

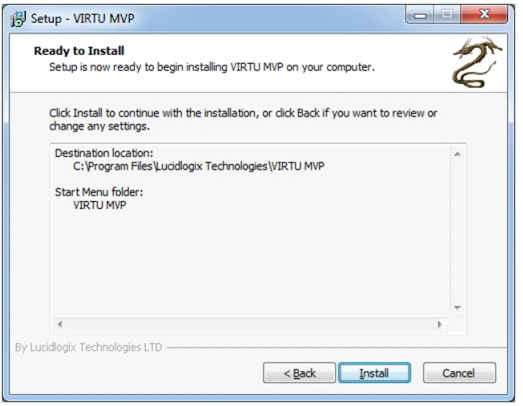

Setup - VIRTU MVP
Select Start Menu Folder
Where should Setup place the program's shortcuts?
Setup will create the program's shortcuts in the following Start Menu folder.
To continue, click Next. If you would like to select a different folder, click Browse.
VIRTU MVP
Browse...
By Lucidlogix Technologies LTD
< Back
Next >
Cancel

7. Click **Next** to accept the default Start Menu folder.

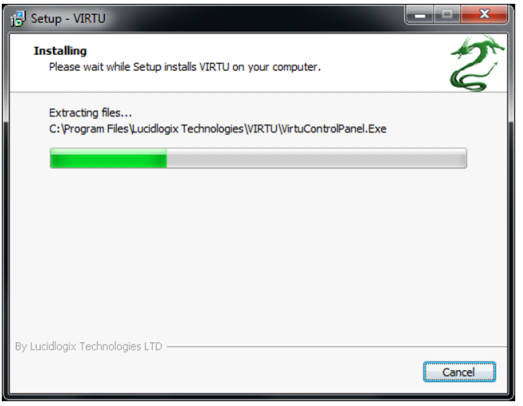
An information page is displayed – please read it.


Setup - VIRTU MVP
Information
Please read the following important information before continuing:
During the installation the monitor might go blank for a few minutes.
Do not shut down your computer or try to restart, until the installation process has finished.
By Lucidlogix Technologies LTD
< Back
Next >
Cancel

8. Click **Next**. The Ready to Install dialog box is displayed.


Setup - VIRTU MVP
Ready to Install
Setup is now ready to begin installing VIRTU MVP on your computer.
Click Install to continue with the installation, or click Back if you want to review or change any settings.
Destination location:
C:\Program Files\Lucidlogix Technologies\VIRTU MVP
Start Menu folder:
VIRTU MVP
By Lucidlogix Technologies LTD
< Back
Install
Cancel

9. Click **Next** to to begin installation.



10. When the installation is complete, “Completing the VIRTU MVP Setup Wizard” window is displayed.

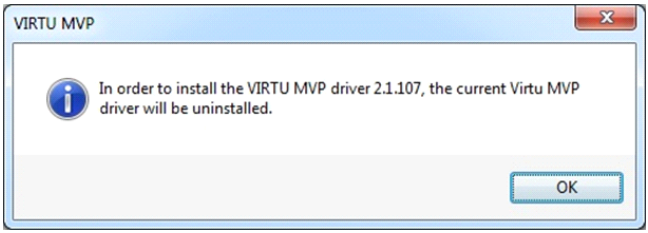
Setup - VIRTU MVP
Completing the VIRTU MVP Setup Wizard
To complete the installation of VIRTU MVP, Setup must restart your computer. Would you like to restart now?
Yes, restart the computer now
No, I will restart the computer later
Finish

Select “Yes, restart the computer now” option and click Finish. The VIRTU Universal MVP installation process is completed.

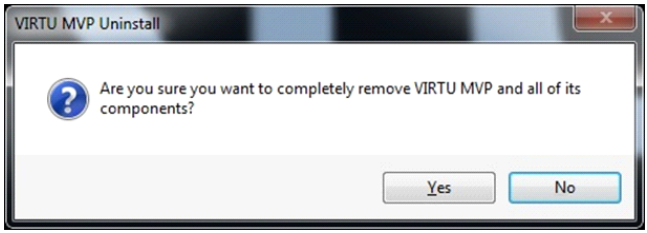
5-1. Older version installed

In case that there is older VIRTU version installed on your system, the driver installation program will automatically identify it and will perform “uninstall” procedure.

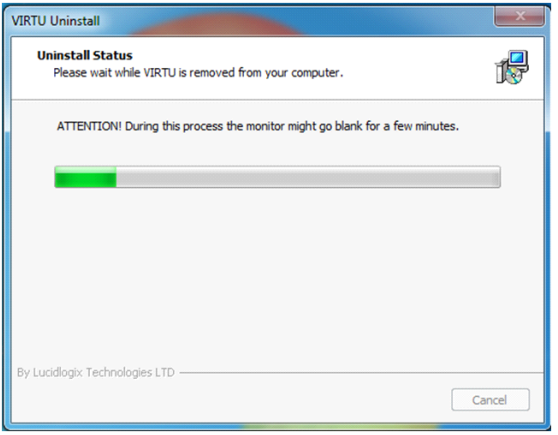
1. The following message is displayed:



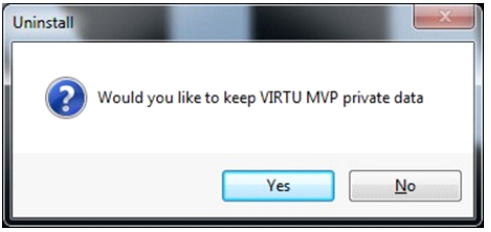
2. Click “OK”. The following message is displayed:



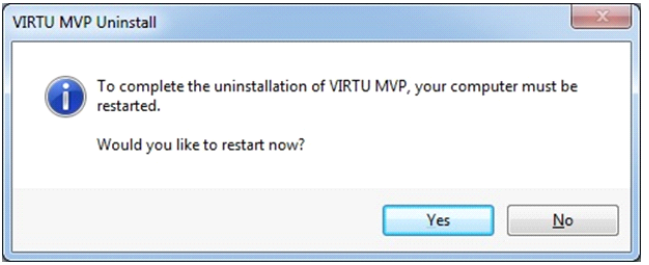
3. Click “Yes” and the “Uninstall” process will start. The following screen is displayed:


VIRTU Uninstall
Uninstall Status
Please wait while VIRTU is removed from your computer.
ATTENTION! During this process the monitor might go blank for a few minutes.
By Lucidlogix Technologies LTD
Cancel

4. Once the uninstall process finished, the following message is displayed:



5. It is recommended to click “No”. Please note that private data such as new games added by the user to the game list will be lost. The following restart message is displayed:

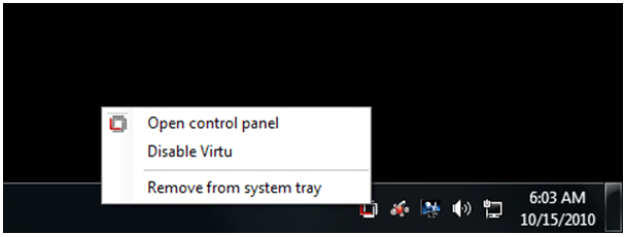

VIRTU MVP Uninstall
To complete the uninstallation of VIRTU MVP, your computer must be restarted.
Would you like to restart now?
Yes
No

6. Click “Yes” and wait for the computer to restart. Start the installation process as described in the chapter 6.

Chapter 6

VIRTU Universal MVP Operation

Once installed, the Lucid logo shows on system tray (the right bottom corner of the screen). Mouse right click at the icon, will display the following screen.



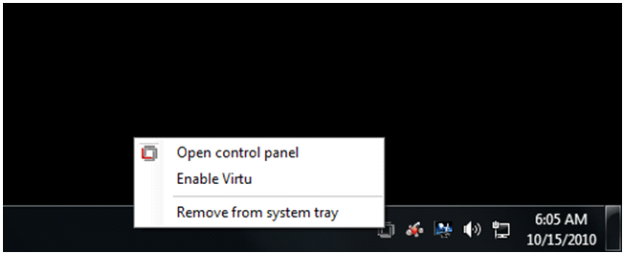
Clicking on the “Open control panel” option will open a new window with VIRTU Universal MVP control panel.

Clicking on “Disable” option, allows the user to stop VIRTU function. Invisible or grey logo means VIRTU is disabled.

In case no logo is shown on the system tray, it is possible to activate the driver and the control panel manually by using the following instructions:

1. Click “Start”, “Programs” and “VIRTU Universal MVP”.
2. Click using the right mouse button on “VIRTU Universal MVP Control Panel”.

In case logo icon is grey, use mouse right click while pointing at the logo to get the following screen:



Clicking on the “Enable” option, will activate the VIRTU Universal MVP.

6-1. VIRTU Universal MVP Control Panel

In case that there is older VIRTU version installed on your system, the driver installation program will automatically identify it and will perform "uninstall" procedure.

6.1.1 Main Tab

When opening the VIRTU Universal MVP control panel (either from the start menu or from the system tray icon), the following window is displayed:

By pressing a big "On" button VIRTU Universal MVPsolution is enabled. If "Show in System Tray" is selected, a small control panel icon will be displayed on the system tray together with the rest of the current running applications.

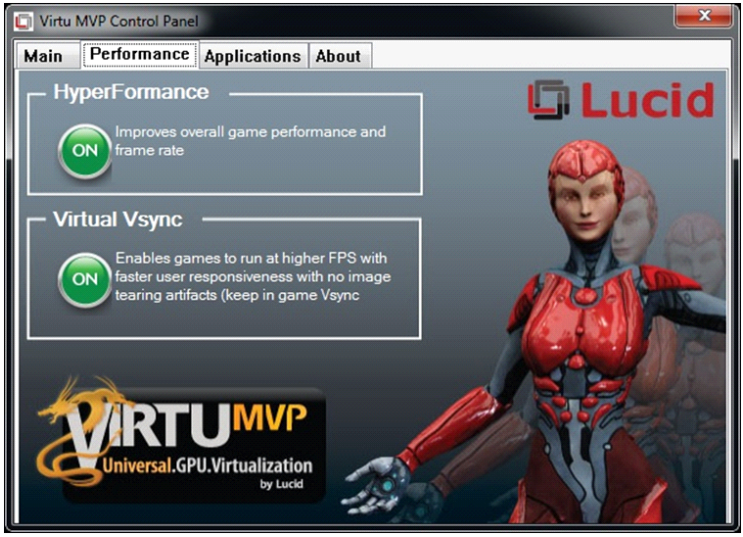
"In-Game icon" selection is used to enable/disable in game VIRTU logo indication. The following options are available:

1. Show – The logo will be constantly displayed in the selected corner of the screen
2. Show for a few seconds - The logo will be shown for a few second and then will disappear
3. Hide – No logo will be shown

"Chose a Corner" – is a control to select a corner of the screen in which VIRTU Universal MVP logo will be displayed

6.1.2 Main Tab

If Performance tab is selected, the following screen is displayed:



This screen controls the unique Virtu Universal MVP performance and visual quality optimization features.

By toggling On/Off buttons on HyperFormance and Virtual Vsync features, these features can be enabled/disabled for all games.

"HyperFormance" – When enabled, improves overall game responsiveness performance and observed frame rate

"Virtual Vsync" – Enables games to run at high FPS with fast user responsiveness while eliminating no image tearing artifacts. You must keep in game Vsync option enabled to enjoy this feature standalone.

Both features work well together, providing uncompromised visual quality together with extra performance and game responsiveness.

6.1.3 Games Tab

If the Games tab is selected, the following screen is displayed:

This screen shows the applications that VIRTU Universal MVP supports with the available graphic cards. The list includes the applications that meet functionality and performance tests done by Lucid quality assurance.

"D" column selected means application will use discrete GPU when running, regardless of physical display cables connection. Good for 3D extensive applications.

"I" column selected means application will use integrated GPU when running, regardless of physical display cables connection. Good for Media extensive applications

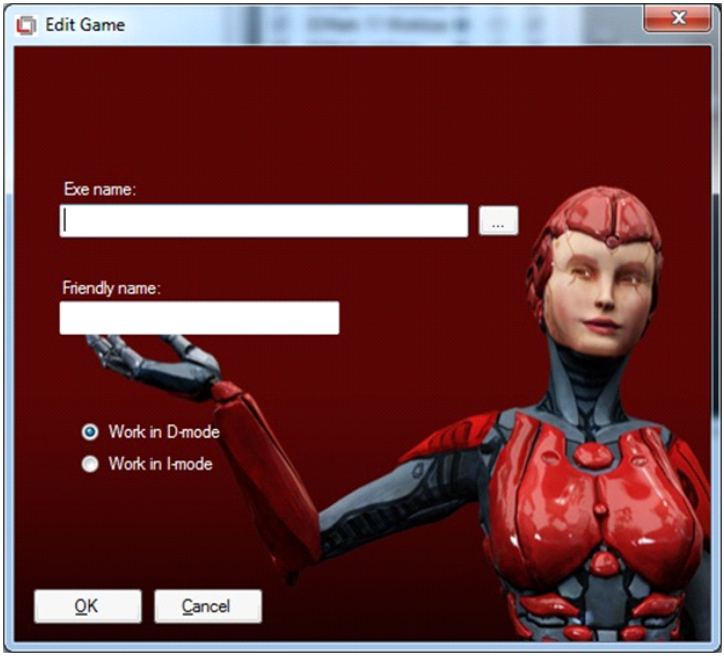
"H" column checked means application will use "HyperFormance" feature when HyperFormance enabled in "Performance" tab

Note: Not all application can are currently qualified to use HyperFormance feature. Unqualified application may experience some issues.

VIRTU allows users to add new applications using the "Add", "Edit" and "Remove" buttons. Lucid cannot guarantee the functionality and performance of applications that were not part of the Lucid qualified application list provided with the product.

Note: Adding and editing of the applications list is disabled in evaluation versions of the product.

When selecting the “Add” option, the following window is displayed:



Place the desired application full “exe” file path in the “exe name” box. Clicking on the “…” button next to the “exe name” box allows using a standard Windows browser to find the location of the desired application “exe” file.

The “Friendly name” box allows the user to give the desired application a name that best describes the application. This is a free text box.

Press “OK” after filling the required information. This will automatically add and application to the supported game list. Once the desired application will activate, VIRTU Universal MVP will be applied to this application.

Note - adding manually an application that was not originally part of the game list means that the application did not pass Lucid QA tests. Lucid cannot guarantee the functionality and performance of applications that were not part of the Lucid qualified application list provided with the driver.

6.1.4 About Tab

If the "About" tab is selected, the following screen is displayed:

This screen provides VIRTU version installed. In the above example, the version is "2.1.109".

6.1.4.1 Activation

Virtu Universal MVP is licensed to motherboards. When installed on motherboard which have MVP license embedded, Virtu Universal MVP will try to activate itself through internet approximately each 5-10 minutes. If for some reason auto-activation process fails, or internet is not available for 30 days, user will have to manually activate Virtu Universal MVP by pressing "Activate" button.

When Virtu Universal MVP successfully activates, the 'About" tab will look like this: